

ACCESS SERVICE

TABLE OF CONTENTS

	<u>Page No.</u>
Concurring Carriers	21
Connecting Carriers	21
Other Participating Carriers	21
Explanation of Symbols	22
Explanation of Abbreviations	22
Reference to Other Tariffs	24
Reference to Technical Publications	24
1. <u>Application of Tariff</u>	27
2. <u>General Regulations</u>	28
2.1 <u>Undertaking of the Telephone Company</u>	28
2.1.1 Scope	28
2.1.2 Limitations	28
2.1.3 Liability	28
2.1.4 Provision of Services	29
2.1.5 Installation and Termination of Services	30
2.1.6 Maintenance of Services	30
2.1.7 Changes and Substitutions	30
2.1.8 Discontinuance and Refusal of Services	31
2.1.9 Limitation of Use of Metallic Facilities	32
2.1.10 Rights to Telephone Numbers	32
2.1.11 Representations	32
2.2 <u>Use</u>	32
2.2.1 Interference or Impairment	32
2.2.2 Unlawful Use	33
2.3 <u>Obligations of the Customer</u>	33
2.3.1 Damages and Indemnification	33
2.3.2 Return of Facilities	34
2.3.3 Equipment Space and Power	34
2.3.4 Availability for Testing	35
2.3.5 Balance	35

ACCESS SERVICE

2.	<u>General Regulations (Cont'd)</u>	<u>Page No.</u>
2.3	<u>Obligations of the Customer (Cont'd)</u>	
2.3.6	Design of Customer Services	35
2.3.7	References to the Telephone Company	35
2.3.8	Coordination with Respect to Network Contingencies	35
2.3.9	Assignment or Transfer of Services	35
2.3.10	Certification of Special Access Services (Lines) as Interstate	36
2.4	<u>Payment Arrangements and Credit Allowances</u>	38
2.4.1	Payment of Rates, Charges and Deposits	38
2.4.2	Minimum Periods	40
2.4.3	Credit Allowance for Service Interruptions	41
2.4.4	Access Services Provided by More Than One Telephone Company	45
2.5	<u>Connections</u>	50
2.6	<u>Definitions</u>	50
	Access Code	50
	Access Minutes	50
	Access Tandem	50
	Answer/Disconnect Supervision	50
	Asynchronous	51
	Asynchronous Polled Interface (APIA)	51
	Attenuation Distortion	51
	Authorized Billing Agent	51
	Balance (100 Type) Test Line	51
	Bit	51
	Business Day	51
	Busy Hour Minutes of Capacity (BHMC)	52
	Byte	52
	Call	53
	Call Set-up	53
	CCS	53
	Central Office	53
	Central Office Code	53
	Channel(s)	53
	Channel Service Unit	53
	Channelize	53
	Circuit Termination	54
	Clear Channel Capability (CCC)	54
	Closed User Group (CUG)/International Closed User Group (ICUG)	54
	C-Message Noise	54

ACCESS SERVICE

2.	<u>General Regulations</u> (Cont'd)	<u>Page No.</u>	
2.6	<u>Definitions</u> (Cont'd)		
	C-Notched Noise	54	
	Coin Station	54	
	Coinless Pay Telephone	54	
	Common Line	55	
	Communications System	55	
	Completed Call	55	
	CCITT	55	
	Cost	55	
	Customer(s)	55	
	DTE Backup	56	
	Data Network Address (DNA)	56	
	Data Terminal Equipment (DTE)	56	
	Data Transmission (107 Type) Test Line	56	
	Decibel (dB)	56	
	Decibel Reference Noise C-Message Reference to 0 (dBrnC)	56	
	Detail Billing	56	
	Direct Call	56	
	Display System Protocol (DSP)	57	
	Dual Tone Multifrequency Address Signaling	57	
	Echo Path Loss (EPL)	57	
	Echo Return Loss (ERL)	57	
	Effective 2-Wire	57	
	Effective 4-Wire	57	
	800 Data Base Access Service	58	(N)
	800 Series	58	(N)
	800 Service Provider	58	
	End Office Switch	59	
	End User	59	
	Entrance Facility	59	
	Entry Switch	59	
	Envelope Delay Distortion (EDD)	59	
	Equal Level Echo Path Loss (ELEPL)	59	
	Exchange	59	
	Exchange Termination	60	
	Expected Measured Loss (EML)	60	
	Fast Select	60	
	Firm Order Confirmation Date	60	
	First Point of Switching	60	
	Frequency Shift	60	
	Grandfathered	60	
	Holding Time	61	
	Hub	61	
	Hunt Group	61	
	Immediately Available Funds	61	
	Impulse Noise	61	
	Individual Case Basis (ICB)	61	
	Inserted Connection Loss (ICL)	61	

ACCESS SERVICE

2.	<u>General Regulations</u> (Cont'd)	<u>Page No.</u>
2.6	<u>Definitions</u> (Cont'd)	
	Interexchange Carrier(s) (IC)	62
	Intermodulation Distortion	62
	Interstate Communications	62
	Interstate Service Arrangement	62
	Intrastate Communications	62
	Jointly Used Subscriber Plant	62
	Kilobits Per Second (Kbps)	62
	Kilopacket	63
	Kilosegment	63
	Line Side Connection	63
	Local Access and Transport Area	63
	Local Circuit Facility	63
	Local Tandem Switch	63
	Logical Channel	63
	Loop Around Test Line	63
	Loss Deviation	64
	Maintenance Test Unit (MTU)	64
	Market Service Area	64
	Message	64
	Milliwatt (102 Type) Test Line	64
	Minutes of Use	64
	Multiline Business Customer	64
	Negotiation	64
	Network Control Signaling	65
	Network Processing Charge	65
	Non-Standard Default Feature	65
	Nonsynchronous Test Line	65
	North American Numbering Plan	65
	Off-hook	65
	On-hook	65
	Open Circuit Test Line	66
	Originating Direction	66
	Packet	66
	Packet Assembler/Disassembler (PAD)	66
	Packet Switch	66
	Pay Telephone Line	66
	Permanent Virtual Circuit (PVC)	66
	Phase Jitter	67
	Point of Termination	67
	Premises	67
	Primary Exchange Carrier	67
	Protocol	67
	Public Telephone	67

ACCESS SERVICE

2.	<u>General Regulations</u> (Cont'd)	<u>Page No.</u>
2.6	<u>Definitions</u> (Cont'd)	
	Query	67
	Registered Equipment	68
	Responsible Organization	68
	Return Loss	68
	Reverse Charge Blocking	68
	Secondary Exchange Carrier	68
	Segment	68
	Semi-public Telephone	68
	Service Management System/800	69
	Serving Wire Center	69
	Seven Digit Manual Test Line	69
	Short Circuit Test Line	69
	Signal-to-C-Notched Noise Ratio	70
	Singing Return Loss (SRL)	70
	Single Line Business Customer	70
	Switch Termination	70
	Synchronous	70
	Synchronous Data Link Control (SDLC)	70
	Synchronous Test Line	70
	Telecommunications Service Provider	70
	Terminating Direction	71
	Throughput Class	71
	Transmission Measuring (105 Type) Test Line/Responder	72
	Trunk	72
	Trunk Group	72
	Trunk Side Connection	72
	Two-Wire to Four-Wire Conversion	72
	V&H Coordinates Method	72
	Virtual Circuit	72
	WATS Serving Office	73
	Window Size	73
	Wire Center	73
	X.25 Packet Mode Protocol	73
	X.75 Packet Mode Protocol	73

ACCESS SERVICE

3.	<u>End User Access Service</u>	<u>Page No.</u> 74
3.1	<u>General Description</u>	74
3.2	<u>Undertaking of the Telephone Company</u>	74
3.3	<u>Payment Arrangements and Credit Allowances</u>	74
3.4	<u>Rate Regulations</u>	75
3.5	<u>Rates and Charges</u>	77
3.6	<u>Lifeline Assistance Plan Jurisdictions</u>	80
4.	<u>Switched Access Service</u>	81
4.1	<u>General</u>	81
4.1.1	Feature Group Arrangements	81
4.1.2	Rate Elements	84
4.1.3	Circuit Design Layout	106
4.1.4	Acceptance Testing	107
4.1.5	Special Facilities Routing	107
4.1.6	Ordering Options and Conditions	107
4.2	<u>Provision and Description of Switched Access Service Feature Groups</u>	107
4.2.1	Feature Group A	108
4.2.2	Feature Group B	112
4.2.3	Feature Group C	115
4.2.4	Feature Group D	118
4.2.5	Optional Features	122
4.2.6	Optional Blocking and Screening Service	132
4.2.7	800 Data Base Access Service	134
4.2.8	Billing Name and Address	137

ACCESS SERVICE

4.	<u>Switched Access Service (Cont'd)</u>	<u>Page No.</u>
4.3	<u>Obligations of the Telephone Company</u>	139
4.3.1	Network Management	139
4.3.2	Design and Traffic Routing of Switched Access Service	139
4.3.3	Provision of Service Performance Data	140
4.3.4	Trunk Group Measurement Reports	140
4.3.5	Determination of Number of Transmission Paths	140
4.3.6	Determination of Number of End Office Terminations	141
4.3.7	Design Blocking Probability	141
4.4	<u>Obligations of the Customer</u>	144
4.4.1	Report Requirements	144
4.4.2	On and Off-Hook Supervision	144
4.4.3	Customer's V&H Locations	144
4.5	<u>Transmission Performance Capabilities</u>	145
4.5.1	Standard Transmission Performance	145
4.5.2	Data Transmission Parameters	150
4.6	<u>Rate Regulations</u>	153
4.6.1	Types of Rates and Charges	153
4.6.2	Minimum Periods	155
4.6.3	Minimum Monthly Charge	155
4.6.4	Change of Feature Group Type	155
4.6.5	Moves	155
4.6.6	Accumulation of Number of Transmission Paths	156
4.6.7	Recording of Minutes of Use	157
4.6.8	Determination of Interstate Usage for Mixed Interstate and Intrastate Switched Access Service	158
4.6.9	Message Unit Credit	162
4.6.10	Certain Local Services	163
4.6.11	Premium and Transitional Charges	163
4.6.12	Mileage Measurement	166
4.6.13	Shared Use	169
4.6.14	Application of Rates for Extension Service	169
4.6.15	Shared Transport	170

ACCESS SERVICE

4.	<u>Switched Access Service (Cont'd)</u>	<u>Page No.</u>	
4.7	<u>Rates and Charges</u>		
4.7.1	Switched Transport	171	(T)
4.7.2	End Office	173	
4.7.3	800 DB Service	174	
4.7.4	Optional Blocking and Screening	175	
4.7.5	Billing Name and Address	176	
4.7.6	Abbreviated Dialing Arrangement	177	
5.	<u>Special Access Service</u>	178	
5.1	<u>General</u>	178	
5.1.1	Channel Types	178	
5.1.2	Rate Categories	179	
5.1.3	Protocol Combinations	181	
5.1.4	Service Configurations	181	
5.1.5	Special Facilities Routing	182	
5.1.6	Circuit Design Layout	182	
5.1.7	Acceptance Testing	182	
5.1.8	Ordering Options and Conditions	183	
5.1.9	Alternate Use	183	
5.2	<u>Technical Service Descriptions for Special Access Service</u>	183	
5.2.1	Analog Services	184	
5.2.2	Digital Services	205	
5.3	<u>Protocol Codes</u>	212	
5.3.1	Glossary of Protocol Codes and Options	213	
5.3.2	Impedance	217	
5.3.3	Digital Hierarchy Protocol Codes (4DSX)	217	
5.4	<u>Rate Regulations</u>	218	
5.4.1	Types of Rates and Charges	218	
5.4.2	Minimum Periods	219	
5.4.3	Moves	219	
5.4.4	Mileage Measurement	219	
5.4.5	Shared Use Analog and Digital Capacity Services	220	

ACCESS SERVICE

5.	<u>Special Access Service</u> (Cont'd)	<u>Page No.</u>	
5.4	<u>Rate Regulations</u> (Cont'd)		
5.4.6	Special Access Surcharge	221	
5.4.7	Facility Hubs	224	
5.4.8	Discontinuance of Minimum Term Discount Plans	225	(N)
5.5	<u>Rates and Charges</u>	226	
5.5.1	Optional Features and Functions	226	
5.5.2	Special Access Surcharge	238	
5.5.3	Narrowband 1 Service	238	
5.5.4	Narrowband 2 Service	239	
5.5.5	Voice Grade Service	240	
5.5.6	Program Audio Service	241	
5.5.7	Video Service	245	
5.5.8	Wideband Analog Service	246	
5.5.9	Wideband Digital Service	247	
5.5.10	Digital Data Access Service	248	
5.5.11	High Capacity Service	251	
6.	<u>Specialized Network Services</u>	253	
6.1	<u>General</u>	253	
6.2	<u>Reserved for Future Use</u>	253	
7.	<u>Specialized Service or Arrangements</u>	254	
7.1	<u>General</u>	254	
7.2	<u>Reserved for Future Use</u>	254	
8.	<u>Additional Engineering, Additional Labor and Miscellaneous Charges</u>	255	
8.1	<u>Additional Engineering</u>	255	

ACCESS SERVICE

8.	<u>Additional Engineering, Additional Labor and Miscellaneous Charges (Cont'd)</u>	<u>Page No.</u>	
8.2	<u>Additional Labor</u>	257	
	8.2.1 Overtime Installation	257	
	8.2.2 Overtime Repair	257	
	8.2.3 Additional Installation Testing	257	
	8.2.4 Standby	257	
	8.2.5 Testing and Maintenance with Other Telephone Companies	257	
	8.2.6 Other Labor	257	
	8.2.7 Charges for Additional Labor	258	
8.3	<u>Miscellaneous Charges</u>	260	
	8.3.1 Maintenance of Service Charge	260	
	8.3.2 Restoration Priority Charge	262	
	8.3.2.1 Telecommunications Service Priority (TSP) System	262	
	8.3.3 Testing Services	265	
	8.3.4 Presubscription Procedures	272	
	8.3.5 Payphone Service: Coin Supervision Additive	272	(N)
9.	<u>Ordering Options for Switched and Special Access Services</u>	279	
9.1	<u>General</u>	279	
	9.1.1 Ordering Conditions	279	
	9.1.2 Provision of Other Services	281	
	9.1.3 Special Construction	282	
9.2	<u>Facilities Access Order</u>	282	
	9.2.1 Facilities Access Order Charge	283	
	9.2.2 Facilities Access Order Modifications	285	
	9.2.3 Selection of Facilities for Access Orders	288	
	9.2.4 Minimum Period	288	
	9.2.5 Minimum Period Charges	288	
	9.2.6 Cancellation of a Facilities Order	289	
	9.2.7 Facilities Test and Line Up	290	
	9.2.8 Delayed Activation Credit	290	
	9.2.9 Discontinuation of Service	291	
	9.2.10 Access Orders for Service Provided By More Than One Telephone Company	291	
10.	<u>Special Construction</u>	294	
10.1	<u>General</u>	294	
10.2	<u>Conditions Requiring Special Construction</u>	294	

ACCESS SERVICE

10.	<u>Special Construction</u> (Cont'd)	<u>Page No.</u>	
10.3	<u>Maximum Termination Liability and Termination Charge</u>	294	
10.4	<u>Charges to Provide Permanent Facilities</u>	297	
11.	<u>Special Facilities Routing of Access Services</u>	298	
11.1	<u>Description of Special Facilities Routing of Access Services</u>	298	
11.1.1	Diversity	298	
11.1.2	Avoidance	298	
11.1.3	Cable-Only Facilities	298	
11.2	<u>Rates and Charges for Special Facilities Routing of Access Services</u>	299	
11.2.1	Diversity	299	
11.2.2	Avoidance	299	
11.2.3	Diversity and Avoidance Combined	299	
11.2.4	Cable-Only Facilities	299	
12.	<u>Special Federal Government Services</u>	300	
12.1	<u>General</u>	300	
12.2	<u>Emergency Conditions</u>	300	
12.3	<u>Intervals to Provide Service</u>	301	
12.4	<u>Availability of Facilities</u>	301	
12.5	<u>Federal Government Regulations</u>	301	
12.6	<u>Service Offerings to the Federal Government</u>	301	
12.6.1	Type and Description	301	
12.6.2	Mileage Application	305	
12.6.3	Rates and Charges	305	
13.	<u>Private Line Services</u>	310	(T)
13.1	<u>General</u>	310	(N)

Certain regulations previously found on this page can now be found on Page 19.1.

Issued: July 31, 2001

Effective: August 15, 2001

ACCESS SERVICE

13.	<u>Private Line Services</u> (Cont'd)	310	
13.2	<u>Technical Standards</u>	310	(N)
13.2.1	Description	310	
13.2.2	Transmission Specifications	310	
13.2.3	Standard Protocol Combinations	310	
13.3	<u>Rate Regulations</u>	310	
13.3.1	Rates and Charges	310	
13.3.2	Discontinuance of Term Commitments	310.1	
13.4	<u>On-Net Wire Centers – Frontier Communications of Minnesota</u>	310.3	
13.4.1	Metro On-Net	310.3	
13.4.2	Non-Metro On-Net	310.3	
13.5	<u>Rates and Charges – Frontier Communications of Minnesota</u>	310.4	
13.5.1	End User Premises On-Net to On-Net Wire Center	310.4	
13.5.2	End User Premises On-Net to End User Premises On-Net	310.5	
13.5.3	On-Net Wire Center to another On-Net Wire Center	310.6	(N)
14.	<u>Carrier Common Line Access Service</u>	311	(M)
14.1	<u>General Description</u>	311	
14.2	<u>Limitations</u>	311	(M)

Certain regulations on this page formerly appeared on Page 19.

Issued: July 31, 2001

Effective: August 15, 2001

14450 Burnhaven Drive
Burnsville, MN 55337

ACCESS SERVICE

	<u>Page No.</u>	
14.3 <u>Undertaking the Telephone Company</u>	312	
14.4 <u>Obligations of the Customer</u>	312	
14.5 <u>Determination of Usage Subject to Carrier Common Line Access Charges</u>	312	
14.6 <u>Resold Services</u>	313	
14.7 <u>Coin Services</u>	320	
14.8 <u>Rate Regulations</u>	322	
14.9 <u>Rates and Charges</u>	326	
15. <u>Advanced Communications Services</u>	327	
15.1 <u>DSL Service</u>	327	(N)
15.1.1 General	327	
15.1.2 Responsibility of the Telephone Company	327	
15.1.3 Rights of the Telephone Company	327	
15.1.4 DSL Access Port	327	(N)
15.2 <u>ADSL Service</u>	328	(T)
15.2.1 Service Description	328	(T)
15.2.2 ADSL Channel	328	(N)
15.2.3 Responsibility of the Customer	329	
15.2.4 Rate Elements	330	(N)
15.3 <u>SDSL Service</u>	330	(T)
15.3.1 Service Description	330	
15.3.2 SDSL Channel	331	
15.3.3 Responsibility of the Customer	331	
15.3.4 Rate Regulations	332	
15.3.5 Rate Elements	333	(T)
15.4 <u>Rates and Charges</u>	333	(T)
15.4.1 DSL	333	
15.4.2 ADSL	333	(T)
15.4.3 SDSL	334	(N)